

DMX-4

Dimmer/Relay Pack

USER MANUAL



Chauvet, 3000 N 29th Ct, Hollywood, FL 33020 U.S.A
(800) 762-1084 – (954) 929-1115
FAX (954) 929-5560
www.chauvetlighting.com

Table of Contents

BEFORE YOU BEGIN	3
WHAT IS INCLUDED	3
UNPACKING INSTRUCTIONS	3
AC POWER	3
SAFETY INSTRUCTIONS	3
INTRODUCTION	4
FEATURES.....	4
DMX CHANNEL SUMMARY	4
PRODUCT OVERVIEW.....	4
SETUP.....	5
POWER	5
MOUNTING	5
Orientation	5
Rigging	5
OPERATING INSTRUCTIONS	6
MENU NAVIGATION	6
OPERATING MODES	6
<i>Running in Chase Mode</i>	6
Select Pattern Chase.....	6
Adjust the Speed	6
Adjust Intensity	6
<i>Running in DMX Mode</i>	7
Select DMX Mode & Set Starting Address.....	7
Optional Dimmer/Relay Setting	7
DMX Control Channel Modes	7
REPLACING A FUSE	7
APPENDIX	8
DMX PRIMER.....	8
Fixture Linking	8
DMX CHANNEL VALUES.....	9
MAINTENANCE	9
RETURNS PROCEDURE	9
CLAIMS	9
GENERAL TROUBLESHOOTING.....	10
TECHNICAL SPECIFICATIONS	11

BEFORE YOU BEGIN

What is included

- DMX-4 Dimmer/Relay Pack
- Detachable power cord (IEC 60320 C-13)
- Warranty Card

Unpacking Instructions

Immediately upon receiving a fixture, carefully unpack the carton, check the contents to ensure that all parts are present, and have been received in good condition. Notify the shipper immediately and retain packing material for inspection if any parts appear damaged from shipping or the carton itself shows signs of mishandling. Save the carton and all packing materials. In the event that a fixture must be returned to the factory, it is important that the fixture be returned in the original factory box and packing.

AC Power

To determine the power requirements for a particular fixture, see the label affixed to the back plate of the fixture or refer to the fixture's specifications chart. A fixture's listed current rating is its average current draw under normal conditions. All fixtures must be powered directly off a switched circuit and cannot be run off a rheostat (variable resistor) or dimmer circuit, even if the rheostat or dimmer channel is used solely for a 0% to 100% switch. Before applying power to a fixture, check that the source voltage matches the fixture's requirement. Check the fixture or device carefully to make sure that if a voltage selection switch exists that it is set to the correct line voltage you will use.

Figure 1 - AC Voltage Switch



Warning!

Verify that the power select switch on your unit matches the line voltage applied. All fixtures must be connected to circuits with a suitable Earth Ground.

Safety Instructions



Please read these instructions carefully, which includes important information about the installation, usage and maintenance?



- Please keep this User Guide for future consultation. If you sell the unit to another user, be sure that they also receive this instruction booklet.
- Always make sure that you are connecting to the proper voltage and that the line voltage you are connecting to is not higher than that stated on decal or rear panel of the fixture.
- This product is intended for indoor use only!
- To prevent risk of fire or shock, do not expose fixture to rain or moisture. Make sure there are no flammable materials close to the unit while operating.
- The unit must be installed in a location with adequate ventilation, at least 50cm from adjacent surfaces. Be sure that no ventilation slots are blocked.
- Always disconnect from power source before servicing or replacing lamp or fuse and be sure to replace with same lamp source.
- Secure fixture to fastening device using a safety chain. Never carry the fixture solely by its head. Use its carrying handles.
- Maximum ambient temperature is Ta: 40°. Do not operate fixture at temperatures higher than this.
- In the event of serious operating problem, stop using the unit immediately. Never try to repair the unit by yourself. Repairs carried out by unskilled people can lead to damage or malfunction. Please contact the nearest authorized technical assistance center. Always use the same type spare parts.
- Don't connect the device to a dimmer pack.
- Make sure power cord is never crimped or damaged.
- Never disconnect power cord by pulling or tugging on the cord.
- Avoid direct eye exposure to lamp while it is on.

Caution!

There are no user serviceable parts inside the unit. Do not open the housing or attempt any repairs yourself. In the unlikely event your unit may require service, please contact CHAUVET.

INTRODUCTION

Features

- universal DMX-512 Dimmer/Relay Pack
- 4 channels of DMX
- set to dimmer or relay
- easy to read LED segment display
- built in stand alone chase patterns
- adjustable chase speed
- switch-selectable power settings 115V or 230V, (240V version available)
- 2 year warranty

DMX Channel Summary

CHANNEL	FUNCTION
1	Dimmer or Switch
2	Dimmer or Switch
3	Dimmer or Switch
4	Dimmer or Switch

Product Overview

Output

10 Amps 115V/Ch, 20A max load
5 Amps 230V/Ch, 10A max load

Button Reference

This is a quick reference of button functions and what they display.

Power Switch

On/Off switch

Power Input

Supplied with IEC 60320 C-14 receptacle for detachable power cord

Voltage Selector

Select either 115V or 230V operation

Fuses

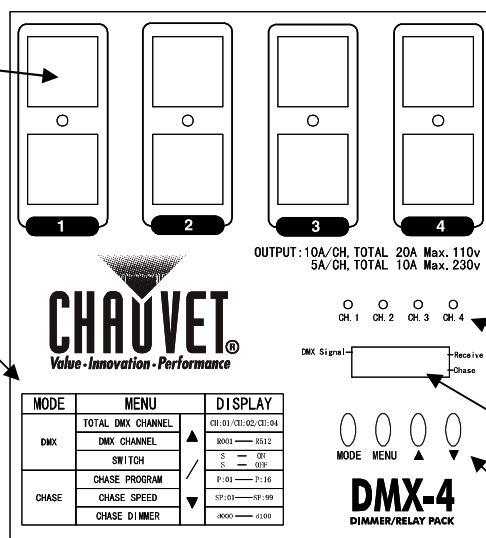
20mm Glass 10A 125V
20mm Glass 6.3A 250V

DMX In

Locking 3-pin XLR male socket

DMX Out

Locking 3-pin XLR female socket



Hanging Bracket

Six holes provide different positions for mounting a pipe clamp



LED Indicator

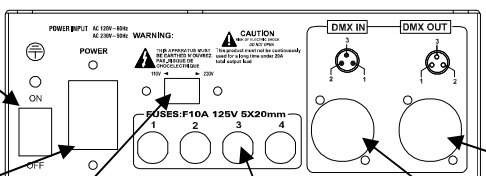
4 LED channel activity indicators

LED Segment

Displays current activity or function state

Menu Buttons

Displays current activity or function state



SETUP

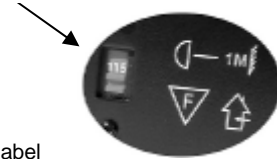
Power

Your product is equipped with switch-selectable AC power setting.

Warning!

Verify that the power select switch on your unit matches the line voltage applied. All fixtures must be connected to circuits with a suitable Earth Ground.

Slide switch up or down depending on your line voltage.



- To determine the power requirements for a particular fixture, see the label affixed to the back plate of the fixture or refer to the fixture's specifications chart.
- A fixture's listed current rating is its average current draw under normal conditions.
- All fixtures must be powered directly off a switched circuit and cannot be run off a rheostat (variable resistor) or dimmer circuit, even if the rheostat or dimmer channel is used solely for a 0% to 100% switch.
- Before applying power to a fixture, check that the source voltage matches the fixture's requirement.
- All fixtures must be connected to circuits with a suitable Earth Ground.

Mounting

ORIENTATION

This fixture may be mounted in any position provided there is adequate room for ventilation. It is also possible to stand this fixture using the removable feet provided.

RIGGING

It is important never to obstruct the fan or vents pathway. Mount the fixture using, a suitable "C" or "O" type clamp. Adjust the angle of the fixture by loosening both knobs and tilting the fixture. After finding the desired position, retighten both knobs.

- When selecting installation location, take into consideration lamp replacement access and routine maintenance.
- Safety cables should always be used.
- Never mount in places where the fixture will be exposed to rain, high humidity, extreme temperature changes or restricted ventilation.

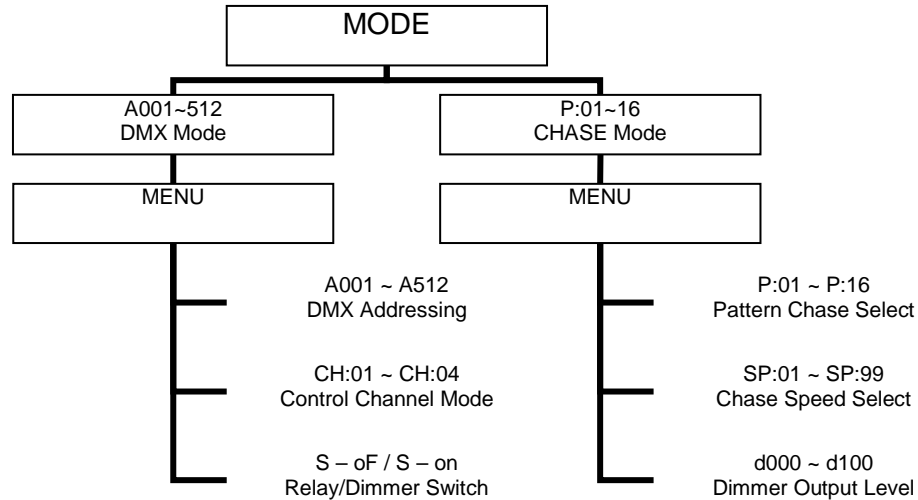
Figure 2 - Hanging Clamp



Note!
Clamp is sold separately.

OPERATING INSTRUCTIONS

Menu Navigation



Operating Modes

The DMX-4 can be controlled using any universal DMX-512 controller. There are also 16 preset chase programs that a user can select for stand alone operation (Chase Mode).

Running in Chase Mode

SELECT PATTERN CHASE

- 1) Press the **MODE** button until the display reads {P:nn}, where n represents a number between 01 and 16.
- 2) Press the (**▲ Button**) and (**▼ Button**) to increase or decrease values representing chase patterns.

ADJUST THE SPEED

- 1) Press the **MODE** button until the display reads {P:nn}, where n represents a number between 01 and 16.
- 2) Press the **MENU** button until the display reads {SP:nn}, where n represents a number between 01 and 99.
- 3) Press the (**▲ Button**) and (**▼ Button**) to increase or decrease values until the desired speed is achieved.

ADJUST INTENSITY

- 1) Press the **MODE** button until the display reads {P:nn}, where n represents a number between 01 and 16.
- 2) Press the **MENU** button until the display reads {dnnn}, where n represents a number between 000 and 100.
- 3) Press the (**▲ Button**) and (**▼ Button**) to increase or decrease values until the desired intensity is achieved.

Running in DMX Mode

This DMX mode enables the use of a universal DMX controller device. Each fixture requires a "start address" that can be set from 001 to 512. A fixture requiring one or more channels for control begins to read the data on the channel indicated by the start address. For example, a fixture that occupies or uses 6 channels of DMX and was addressed to start on DMX channel 100, would read data from channels: 100, 101, 102, 103, 104, and 105. Choose start addresses so that the channels used do not overlap and notate the start address selected for future reference.

If this is your first time addressing a fixture using the DMX-512 control protocol than I suggest jumping to the Appendix Section and read the heading "DMX Primer". It contains very useful information that will help you understand its use.

SELECT DMX MODE & SET STARTING ADDRESS

- 1) Press the **MODE** button until the display reads {Annn}, where n represents a number between 001 and 512.
- 2) Press the (**▲ Button**) and (**▼ Button**) to increase or decrease values until the desired DMX starting address is achieved.

OPTIONAL DIMMER/RELAY SETTING

- 1) Press the **MODE** button until the display reads {Annn}, where n represents a number between 001 and 512.
- 2) Press the **MENU** button until the display reads {S-nn}, where nn represents either (oF) for switching off or (oN) for switching on.
- 3) Press the (**▲ Button**) and (**▼ Button**) to toggle between {S-oN} and {S-oF}.

DMX CONTROL CHANNEL MODES

- 1) Press the **MODE** button until the display reads {Annn}, where n represents a number between 001 and 512.
- 2) Press the **MENU** button until the display reads {CH:nn}, where n represents a number between 01 and 04.
- 3) Press the (**▲ Button**) and (**▼ Button**) to increase or decrease values to select a desired channel output

SELECTION	BEHAVIOR
CH:01	DMX channel 1 will control outputs (1 through 4 combined)
CH:02	DMX channel 1 will control outputs (1 and 2 combined) DMX channel 2 will control outputs (3 and 4 combined)
CH:04	DMX channels 1 through 4 will control outputs 1 through 4 respectively

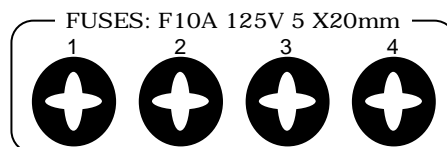
Replacing a fuse



Disconnect the power cord before replacing a fuse and always replace with the same type fuse.



With a Philips head screwdriver unscrew the fuse holder until it can be entirely removed. Remove the damaged fuse from its holder and replace with exact same type fuse. Insert the fuse holder back in its place and reconnect power.



APPENDIX

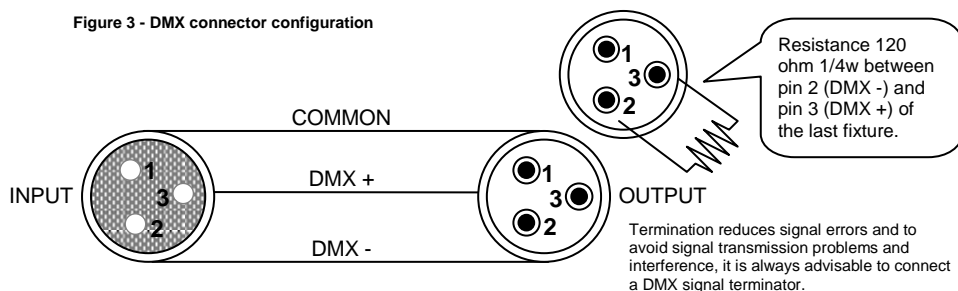
DMX Primer

There are 512 channels in a DMX-512 connection. Channels may be assigned in any manner. A fixture capable of receiving DMX 512 will require one or a number of sequential channels. The user must assign a starting address on the fixture that indicates the first channel reserved in the controller. There are many different types of DMX controllable fixtures and they all may vary in the total number of channels required. Choosing a start address should be planned in advance. Channels should never overlap. If they do, this will result in erratic operation of the fixtures whose starting address is set incorrectly. You can however, control multiple fixtures of the same type using the same starting address as long as the intended result is that of unison movement or operation. In other words, the fixtures will be slaved together and all respond exactly the same.

DMX fixtures are designed to receive data through a serial Daisy Chain. A Daisy Chain connection is where the DATA OUT of one fixture connects to the DATA IN of the next fixture. The order in which the fixtures are connected is not important and has no effect on how a controller communicates to each fixture. Use an order that provides for the easiest and most direct cabling. Connect fixtures using shielded two conductor twisted pair cable with three pin XLR male to female connectors. The shield connection is pin 1, while pin 2 is Data Negative (S-) and pin 3 is Data positive (S+). CHAUVET carries 3-pin XLR DMX compliant cables, DMX-10 (33'), DMX-4.5 (15') and DMX-1.5 (5')

FIXTURE LINKING

Figure 3 - DMX connector configuration



Note!

If you use a controller with a 5 pin DMX output connector, you will need to use a 5 pin to 3 pin adapter. Chauvet Model No: DMX5M. The chart below details a proper cable conversion:

3 PIN TO 5 PIN CONVERSION CHART

CONDUCTOR	3 Pin Female (output)	5 Pin Male (Input)
GROUND/SHIELD	Pin 1	Pin 1
DATA (-) SIGNAL	Pin 2	Pin 2
DATA (+) SIGNAL	Pin 3	Pin 3
DO NOT USE		Do not use
DO NOT USE		Do not use

DMX Channel Values

Channel	Value	Function Dimmer or Switch
1	000 ⇔ 255	Off > Full Intensity/On
2	000 ⇔ 255	Off > Full Intensity/On
3	000 ⇔ 255	Off > Full Intensity/On
4	000 ⇔ 255	Off > Full Intensity/On

Maintenance

To maintain optimum performance and minimize wear fixtures should be cleaned frequently. Usage and environment are contributing factors in determining frequency. As a general rule, fixtures should be cleaned at least twice a month.

Unplug fixture from power. Use a vacuum or air compressor and a soft brush to remove dust collected on external vents and internal components.

Returns Procedure

Returned merchandise must be sent prepaid and in the original packing, call tags will not be issued. Package must be clearly labeled with a Return Merchandise Authorization Number (RA #). Products returned without an RA # will be refused. Call CHAUVET and request RA # prior to shipping the fixture. Be prepared to provide the model number, serial number and a brief description of the cause for the return. Be sure to properly pack fixture, any shipping damage resulting from inadequate packaging is the customer's responsibility. CHAUVET reserves the right to use its own discretion to repair or replace product(s). As a suggestion, proper UPS packing or double-boxing is always a safe method to use.

Claims

Damage incurred in shipping is the responsibility of the shipper; therefore the damage must be reported to the carrier upon receipt of merchandise. It is the customer's responsibility to notify and submit claims with the shipper in the event that a fixture is damaged due to shipping. Any other claim for items such as missing component/part, damage not related to shipping, and concealed damage, must be made within seven (7) days of receiving merchandise.

General Troubleshooting

Symptom	Solution(s)	Applies to			
		Lights	Foggers & Snow	Controllers	Dimmers & Chaser
Auto shut off	Check fan thermal switch reset	✓			
Beam is very dim or not bright	Clean optical system or replace lamp Check 220/110v switch for proper setting	✓			
Breaker/Fuse keeps blowing	Check total load placed on device				✓
Chase is too slow	Check users manual for speed adjustment	✓		✓	✓
Device has no power	Check for power on Mains. Check device's fuse. (internal and/or external)	✓		✓	✓
Fixture is not responding	Check DMX Dip switch settings for correct addressing Check DMX cables Check polarity switch settings	✓			
Fixture is on but there is no movement to the audio	Make sure you have the correct audio mode on the control switches. If audio provided via ¼" jack, make sure a live audio signal exists Adjust sound sensitivity knob	✓		✓	✓
Lamps cuts off sporadically	Possible bad lamp or fixture is overheating. Lamp may be at end of its life.	✓			
Light will not come on after power failure	Some discharge lamps require a cooling off period before the electronics in the fixture can kick start it again, wait 5 to 10 minutes before powering up	✓			
Loss of signal	Use only DMX cables Install terminator Note: Keep DMX cables separated from power cables or black lights.	✓	✓	✓	✓
Motor movements are jerky or jumpy	Possible bad motor driver or sensors Check polarity switch on controller	✓		✓	
Moves slow	Check 220/110v switch for proper setting	✓			
No flash	Re-install bulb, may have shifted in shipping	✓			
No light output	Check slip ring & brushes for contact Install bulb Call service technician	✓			
Relay will not work	Check reset switch Check cable connections				✓
Remote does not work	Make sure connector is firmly connected to device	✓	✓		
Stand alone mode	All Chauvet lighting fixtures featuring stand-alone functions do not require additional settings, simply power the fixture and it will automatically enter into this mode	✓			
Unit wobbles when rotating	Check for damages possibly incurred during shipping	✓			

Technical Specifications

WEIGHT & DIMENSIONS

Length.....	210 mm (8.25 in)
Width.....	194 mm (7.65 in)
Height	70 mm (2.75 in)
Weight.....	2.3 Kg (5 lbs)

POWER

Switch-selectable power setting	115V 60 Hz or 230V 50 Hz
European version	240V 50 Hz
AC input.....	3-prong IEC 60320 C14
AC outputs	(8) NEMA 5-15R receptacles
AC output (115V)	10A/Channel, Max 20A
AC output (230V)	5A/Channel, Max 10A

FUSE

Main (115V)	(4) 20mm Glass 10A 125V Fast Blow
Main (230V)	(4) 20mm Glass 6.3A 250V Fast Blow

CONTROL & PROGRAMMING

Data input	locking 3-pin XLR male socket
Data output	locking 3-pin XLR female socket
Data pin configuration	pin 1 shield, pin 2 (-), pin 3 (+)
Protocols.....	DMX-512 USITT
DMX Channels (Mode CH:04)	4
DMX Channels (Mode CH:02)	2
DMX Channels (Mode CH:01)	1

ORDERING INFORMATION

Dimmer/Relay Pack	DMX-4
Fuse 10A	P170FUSE010
Fuse 6.3A	P170FUSE007